

Setting Up BiPAP on E700 Ventilator

BiPAP is a non-invasive ventilation method that delivers two levels of positive airway pressure: Inspiratory Positive Airway Pressure (IPAP) and Expiratory Positive Airway Pressure (EPAP) throughout the entire respiratory cycle.

INTRODUCTION

1 Key Concepts

BiPAP therapy provides two different pressure levels during the respiratory cycle:

- The higher inspiratory positive airway pressure (IPAP) assists with inhalation.
- The lower expiratory positive airway pressure (EPAP) leads to easier exhalation.

IPAP/EPAP

2 Setting Up BiPAP on the E700 Ventilator

The E700 Ventilator combines the features of Continuous Positive Airway Pressure (CPAP) and Pressure Support Ventilation (PSV) to provide BiPAP therapy. Healthcare providers can deliver BiPAP therapy to their patients by adjusting the CPAP and PSV settings:

- CPAP represents EPAP.
- PSV represents IPAP.



Notes:

- IPAP (PSV) should always be higher than EPAP (CPAP).
- CPAP + PSV (BiPAP) is a spontaneous ventilation mode, which supports patients who can initiate their own breaths.

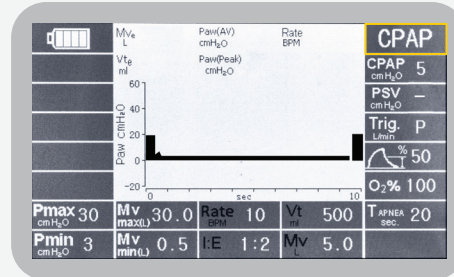
STEPS TO SET UP BIPAP



1 Select CPAP Mode:

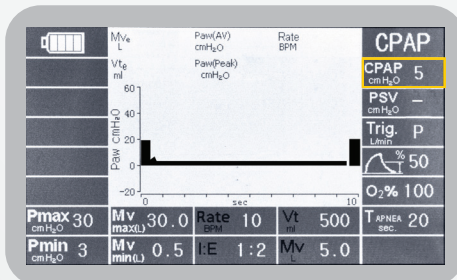


- Turn ON the ventilator.



- Select the CPAP mode.

2 Setting EPAP:

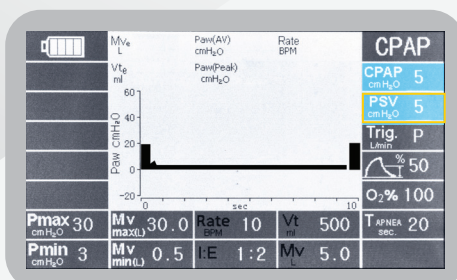


- The CPAP value displayed on the screen corresponds to EPAP.
- Adjust the CPAP value to achieve the desired EPAP level.

Example:

- To set EPAP at 5 cm H₂O, adjust the CPAP setting to 5 cm H₂O.

3 Setting IPAP:

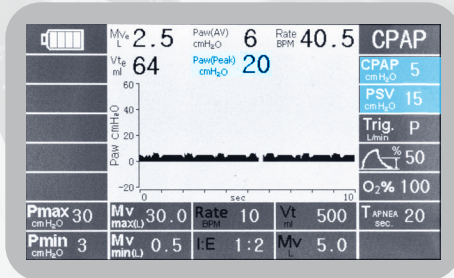


- IPAP is the sum of CPAP + PSV
- Initially, the PSV is set to null in CPAP mode. Adjust it by selecting a value.
- The IPAP is determined by summing the pre-configured CPAP (EPAP) value and the selected PSV value.

Example:

- 1) If the CPAP (EPAP) is set at 5, and the PSV is set at 5, the IPAP will be 10 cmH₂O.
- 2) If the CPAP (EPAP) is set at 5, and the PSV is set at 10, the IPAP will be 15 cmH₂O.

4 Monitoring



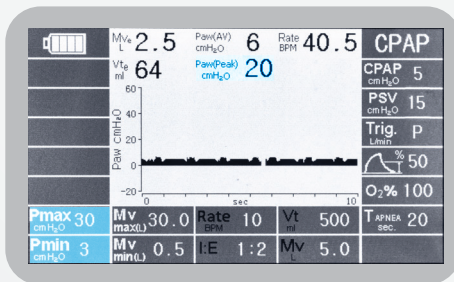
PAW Peak (Peak Airway Pressure) is the maximum pressure measured during the inspiratory phase. In CPAP mode, if a healthcare provider adds PSV to apply CPAP+PSV (BiPAP), the PAW Peak will reflect the sum of CPAP and PSV.

- Monitor the PAW peak on the live monitoring parameters to evaluate the combined pressures.

Example:

- With CPAP at 5 cmH₂O and PSV at 15cmH₂O, the PAW Peak should be approximately 20 cmH₂O.

5 Adjustments



- Ensure the PAW Peak does not exceed the ventilator's maximum pressure limit (Pmax). Adjust the Pmax alarm setting if necessary to accommodate higher pressure requirements.

- **Set alarm limits** for the PAW Peak to be within the minimum (Pmin) and maximum (Pmax) pressure thresholds to avoid unnecessary alarms.

Important Note: The O-Two Hands-On is intended as a quick reference for the setup, settings, and optimal use of O-Two products. For comprehensive information, please refer to the official product manual. This guide is designed to support continuous learning within the medical community, ensuring that users of O-Two devices are equipped with the best practices. However, it does not replace official policies, clinical judgment, or serve as medical advice. Always adhere to the authorized guidelines of your healthcare facility. Consult your institution's specific protocols and policies before making any changes to patient care practices.